

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017501**Date Inspected:** 30-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Mr. Yu Dong Ping/ Mr. Zhao Chao			CWI Present:	Yes	No	
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No	N/A
				Delayed / Cancelled:	Yes	No	N/A
Bridge No:	34-0006			Component:	Tower		

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector Baskar Govindarajan was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

Heavy Dock #Tower Trial assembly

Dimensions Measurement:

This QA inspector, Baskar Govindarajan, performed, following Dimensions measurement:

Misalignment, Gap of Interior splice plates of Skin A, B, C, D and E between South shaft Lift 3 & 4 measured at Heavy Dock inside the Tower. This measurement of gap and misalignment was carried out along with QA Inspector Mr. Sandeep Kumar whose lot no. is B 227. The maximum misalignment observed is -4 mm on Skin C & D. The maximum Gap observed is 7.5 mm in Skin A. All the reading taken has handed over to Task Leader.

Misalignment, Gap of Interior splice plates of Skin A, B, C, D and E between North shaft Lift 3 & 4 measured at Heavy Dock inside the Tower. This measurement of gap and misalignment was carried out along with QA Inspector Mr. Sandeep Kumar whose lot no. is B 227. The maximum misalignment observed is 7 mm on Skin D. The maximum Gap observed is 9 mm in Skin E. All the reading taken has handed over to Task Leader.

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This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Repair welding of weld joint # 28, located on West tower, Lift 3, 109 mtr. elevation, WSD1-FASA3 -2 B/E. Welder is identified as 040610. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – 345+485 – SMAW – 2G (2F) – FCM- Repair.

Weld joint # 10 located on 89 mtr. elevation, Skin A, Façade plate SSD1-FASA3-1 C/E. Welder is identified as 040365. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4113-2.

Weld joint # 10 located on 89 mtr. elevation, Skin A, Façade plate NSD1-FASA3- 1 D/E Welder is identified as 057266. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4113-2.

Weld joint # 11 located on 99 mtr. elevation, Skin E, Façade plate of West tower, Lift 3, WSD1-FASA3-1 C/E. Welder is identified as 057220. ZPMC Certified welding Inspector (CWI) is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4113-2.

Bay #11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 12A, located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 046769. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Weld joint # 8A, located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 041271. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Weld joint # 1A, 7A located on Lift-5 Bracket ND1 – BRSA5 – 2. Welder is identified as 054460 and 044541. ZPMC Certified welding Inspector (CWI) is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Fluxcored Arc Welding (FCAW):

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ORTHOTROPIC BOX GIRDER (OBG)

Weld joint # 186 located on Bike Path BK004A 7- 023. Welder is identified as 049220. ZPMC Certified welding Inspector (CWI) is identified as Zhao xian he. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

Weld joint # 027 , 029 located on Bike Path BK004A 7- 023. Welder is identified as 047023. ZPMC Certified welding Inspector (CWI) is identified as Zhao Xian He. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2131.

Weld joint # 214, 215, located on Bike Path BK004A – 020. Welder is identified as 067138 and 066746. ZPMC Certified welding Inspector (CWI) is identified as Zhao Xian He. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Witness of Magnetic particle Testing (MT)

This QA inspector Witnessed 100% MT performed by ZPMC Quality Control personnel. The member is identified as OBG Component. The component and weld designation identified as follows:

Bike path stiffener welding

BK 005A7 -002 -045, 046

BK 005B7 -004 -069, 070

For further information see below pictures:-

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

No relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng (15921845703), who represents the Office of Structural Materials for your project.

Inspected By: Baskar, Govindarajan

Quality Assurance Inspector

Reviewed By: Clifford, William

QA Reviewer